## **Abstract**

This application specifies invention in finance, partitioned in three sections. The first section describes two processes for the manufacture of financial data using the endogenous variables of a financial security and for estimating change in the security's price given change in its yield with respect to time. It also details an article of manufacture, a financial security, functionally termed a replicated equivalent primary security, two forms of its manufacturing process and a generator. The application also specifies a data processing system containing three business logic servers, as well as a portfolio method for fixed-income mutual and hedge funds. The second section of the description contains a method for the unique preparation of financial data which are given in actual dollar value. It also contains a method and process for the analysis of default risk in insured commercial depository banks, a method of modeling a financial security using a single underlying state variable, a modified martingale conditional probability lattice, plus financial transactions and instruments based on utilizing the FDIC's Bank Insurance Fund, and a method and process to benchmark and to evaluate small sample data sets in small sample environments. The third section delineates specification for a financial engineering calculator.